

SAMPLE PREPARATION SYSTEM
AND ASSOCIATED APPARATUSES AND METHOD

ABSTRACT OF THE DISCLOSURE

A system for preparing a profiling sample is provided. The system comprises a profiling sample, a plurality of vessels, a plate defining a plurality of receptacles corresponding to, and configured to receive, the plurality of vessels, a dispensing unit for dispensing the profiling sample, and a weighing device. The plurality of receptacles are
5 arranged according to a coordinate system. The dispensing unit has a robotic device in communication therewith, wherein the robotic device is configured to operably engage the plate so as to dispense a portion of the profiling sample into a selected vessel. The weighing device has a robotic device in communication therewith, wherein the robotic device is capable of operably engaging the selected vessel, removing the vessel from the
10 corresponding receptacle and into operable engagement with the weighing device to perform a tare measurement of the vessel, and then replacing the vessel in the corresponding receptacle. The robotic device and weighing device are also capable of cooperating to perform a gross measurement, of the vessel and the portion of the profiling sample dispensed therein, using the same procedure for performing the tare
15 measurement. The weight, and thus the mass, of the portion of the profiling sample may then be determined by deducting the tare measurement from the gross measurement. Associated apparatuses and a method are also provided.